

EXHIBIT 124

Highly Confidential Attorneys' Eyes Only

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2 HIGHLY CONFIDENTIAL-ATTORNEYS EYES ONLY
3 IN THE UNITED STATES DISTRICT COURT
4 FOR THE DISTRICT OF MASSACHUSETTS
5 Civil Action No: 1:14-cv-14176-ADB

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7 STUDENTS FOR FAIR ADMISSIONS,
8 INC.,

Plaintiff,

9 v.

10 PRESIDENT AND FELLOWS OF
11 HARVARD COLLEGE

(HARVARD CORPORATION),

12 Defendant.

13 -----X

14 VIDEOTAPED DEPOSITION OF

15 DAVID CARD, Ph.D.

16 Washington, DC

17 April 27, 2018

18 9:07 AM
19
20

21 Reported by:

22 Karen Brynteson, RMR, CRR, FAPR

23 Job No. 139809
24
25

1 D. Card

2 particular rating as your basis for
3 excluding it from the model?

4 A. Yes.

5 Q. Did you do anything else to
6 determine whether there were any other
7 variables in the admissions process
8 that -- in which race played a role and,
9 thus, should be excluded from your model?

10 A. I don't understand the
11 question.

12 Q. Did you see any other
13 deposition testimony that suggested
14 anything else should be excluded from
15 your model because race was considered as
16 part of assigning a particular rating or
17 other variable?

18 A. I'm aware of the fact that in
19 the deposition testimony you and your
20 colleagues asked a number of admissions
21 officers and the Dean directly on some of
22 the other components of the ratings
23 system.

24 Q. And if anyone had -- had
25 answered that -- that race influenced

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2 those other components, you would have
3 considered it appropriate to exclude them
4 from the model?

5 MS. ELLSWORTH: Object to the
6 form.

7 THE WITNESS: Well, Dean
8 Fitzsimmons stated very clearly
9 that race was used in part to
10 determine the overall rating, but
11 that that was not the case with the
12 other pro -- profile ratings.

13 And several other of the
14 admissions officers concurred with
15 that very strongly on direct
16 question.

17 BY MR. STRAWBRIDGE:

18 Q. And you believed them?

19 MS. ELLSWORTH: Object to the
20 form.

21 THE WITNESS: I had no reason
22 not to believe them.

23 BY MR. STRAWBRIDGE:

24 Q. You didn't see any other
25 evidence that made you think that you

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2 should exclude any other variables based
3 on the potential that race was affecting
4 them?

5 A. I -- when I was finishing my
6 -- in the process of trying to finish my
7 rebuttal report, it was very clear that
8 there were a number of disagreements
9 between Professor Arcidiacono and me on a
10 couple of issues.

11 And so I -- I was able to ask
12 Dean Fitzsimmons directly in a telephone
13 conversation if race was involved in the
14 personal rating, for example, and he said
15 no.

16 Q. Did you do anything to verify
17 his testimony?

18 MS. ELLSWORTH: Object to the
19 form.

20 THE WITNESS: No.

21 BY MR. STRAWBRIDGE:

22 Q. You're familiar with what it
23 means to interact a variable in the
24 multivariate logit model?

25 A. In general terms, yes.

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2 Q. And from that baseline, you
3 then do a number of simulations that
4 analyze the effect of various
5 race-neutral alternatives, correct?

6 A. Correct. I do the kind of
7 simulations that have been done in the
8 literature before and that Professor
9 Arcidiacono performs for Mr. Kahlenberg
10 as well, yeah.

11 Q. And, in fact, your method
12 closely follows that used by Mr.
13 Kahlenberg, assisted by Professor
14 Arcidiacono. Right?

15 A. Right, but this is a method
16 that is pretty standard in the literature
17 and was used by several of the other
18 papers in the area.

19 Q. There were two key
20 differences, I think, between your
21 approach with -- between your approach
22 and those of Mr. Kahlenberg's, at least
23 in your initial report?

24 MS. ELLSWORTH: Object to the
25 form.

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2 THE WITNESS: There were a
3 number of differences, yeah.

4 BY MR. STRAWBRIDGE:

5 Q. Let me ask you this: Was one
6 of the big differences the broader
7 measure of socioeconomic disadvantage
8 that you deployed?

9 A. Yes.

10 Q. Another difference between the
11 two of you is, at least in one of his
12 simulations, Mr. Kahlenberg kept a
13 preference for athletes, correct?

14 A. Right.

15 Q. Other than those two
16 differences, do you remember any other
17 differences in how you went about
18 generating your race-neutral simulations?

19 A. Yes. I'm -- I'm using my
20 model and Mr. Kahlenberg is -- is
21 basically using Arcidiacono's model.

22 Q. Right.

23 A. Well, actually not
24 Arcidiacono's model, as I recall, because
25 Arcidiacono's model was fed pooling

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2 across multiple years. And I think for
3 this simulation he refit his model just
4 on the last year, more in the way that I
5 would normally do.

6 So I believe for this analysis
7 he actually fit a separate model for
8 2019.

9 Q. Because we had to generate a
10 class in this case for a specific year's
11 example?

12 MS. ELLSWORTH: Object to the
13 form.

14 THE WITNESS: Yes, and there's
15 a problem with his modeling
16 strategy of not fitting a model
17 year-to-year, which is it doesn't
18 work very well for fitting one
19 particular class.

20 And so the advantage of my
21 class of always fitting a model
22 year-by-year, you don't have to do
23 that whereas he had to reestimate
24 his model, so that's a difference.

25 BY MR. STRAWBRIDGE:

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2 your rebuttal report, go to paragraph
3 192. I just have to find mine.

4 A. Right.

5 Q. Looking at paragraph 192 of
6 your rebuttal report.

7 A. Yes.

8 Q. You agree that simulations 6
9 and 7 are based upon your models?

10 A. Yes.

11 Q. The one adjustment that he
12 makes is -- well, he makes a few
13 adjustments. He keeps the athletic
14 preference in both models, correct?

15 A. Yes.

16 Q. So that means putting them
17 back in, compared to your model, which
18 excluded them, right?

19 A. Yes.

20 Q. In number 6 he eliminates the
21 advantage associated with early action?

22 MS. ELLSWORTH: Object to the
23 form.

24 THE WITNESS: I believe that's
25 correct, yeah.

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2 BY MR. STRAWBRIDGE:

3 Q. And, again, I'm just staying
4 in paragraph 192.

5 A. He eliminates the preferences,
6 yeah, and he changes the -- the four SES
7 characteristics slightly.

8 Q. Right. And you determined
9 that these simulations, you know, as he
10 -- as he -- as he makes those
11 adjustments, are insufficient because the
12 race-neutral alternative "produces a
13 class that is different from the current
14 class in the dimensions I understand
15 Harvard cares about."

16 That's in paragraph 195,
17 correct?

18 A. Yes, that's what I say, yes.

19 Q. All right. So looking at the
20 Exhibit 26 in your report.

21 A. Okay.

22 Q. Which differences in your view
23 render this as insufficient because it
24 produces a class that is different from
25 the current class in dimensions that you

1 D. Card

2 Q. It's 26 percent compared to
3 the 30 percent drop that you termed as
4 dramatic, correct?

5 A. Right.

6 Q. But, again, do you -- do you
7 have a -- do you have any understanding
8 of what difference would be acceptable to
9 Harvard, even if it were a decline in any
10 of these racial categories?

11 MS. ELLSWORTH: Object to the
12 form.

13 THE WITNESS: No.

14 BY MR. STRAWBRIDGE:

15 Q. And you don't have a personal
16 understanding as to what you think is an
17 acceptable or not acceptable decline for
18 purposes of a race-neutral alternative?

19 MS. ELLSWORTH: Object to the
20 form.

21 THE WITNESS: No.

22 BY MR. STRAWBRIDGE:

23 Q. Did the committee tell you
24 that an African American class that
25 represents 10 percent of the admitted

1 D. Card

2 pool is insufficient to meet its goals of
3 obtaining the educational benefits of
4 racial diversity?

5 MS. ELLSWORTH: Object to the
6 form of the question.

7 THE WITNESS: The committee --
8 the only information I received
9 from the committee was, I believe,
10 via counsel, which was a request
11 for more information on the
12 characteristics of the class under
13 alternative scenarios.

14 BY MR. STRAWBRIDGE:

15 Q. And what information in
16 particular do you recall getting that
17 request about?

18 A. About the fractions with the
19 profile ratings of 1 or 2, and I believe
20 concentration, in particular, but I can't
21 -- those ones stick in my mind. I don't
22 remember whether they also asked about
23 geography at some point.

24 Q. I should probably just
25 clarify. This is my fault. I was

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2 A. Yes.

3 Q. And that is, in fact, what
4 this exhibit suggests, correct?

5 A. Yes.

6 Q. Okay. Did you ever construct
7 a model of the personal rating in either
8 of your reports?

9 A. No.

10 Q. You referred several times to
11 Professor Arcidiacono's model, but you
12 did not do your own model of personal
13 rating, correct?

14 A. Correct.

15 Q. And is that because you felt
16 that there was not enough observables in
17 the data to estimate a reliable model of
18 the personal rating?

19 A. I personally felt like we
20 could use the personal rating and the
21 academic rating and the extracurricular
22 rating as ratings. We could include the
23 other variables, some of the other
24 variables that go into the determination
25 of those ratings, and that it would be

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2 preferable to do that than -- but -- so I
3 don't -- my -- I also believe that
4 Professor Arcidiacono's model of personal
5 rating has significant weaknesses.

6 Q. And is -- and is one of those
7 weaknesses the -- the presumed role that
8 unobservables would play if they could be
9 incorporated into the data and the model?

10 MS. ELLSWORTH: Object to the
11 form.

12 THE WITNESS: Yes. His -- his
13 model is relatively sparse. It
14 doesn't include, in fact, some of
15 the variables that I would argue
16 should be included in the overall
17 admissions model.

18 And it also has a relatively
19 low explanatory power.

20 BY MR. STRAWBRIDGE:

21 Q. When you say "relatively low,"
22 what do you mean?

23 A. Well, there's a standard
24 measure of explanatory power, a pseudo
25 R-squared statistic.

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2 is a standard problem in any kind of
3 statistical analysis that there is
4 unobservable components. And one of the
5 reasons why statistical analysis of this
6 kind, an observational statistical
7 analysis can't prove a causality or
8 prove, definitively prove discrimination,
9 for example, is that we don't really know
10 what's the unobservable components that
11 are driving things.

12 Q. Well, you cite some of them in
13 your report, correct?

14 A. I cite some of the potential
15 factors, yes, but I don't -- I don't
16 think I would claim that -- well, I know
17 I would not claim that that's a
18 definitive list.

19 Q. Right. But -- but, for
20 example, you cite the personal essay as a
21 missing data in this analysis, right?

22 MS. ELLSWORTH: Object to the
23 form.

24 THE WITNESS: I give that as
25 an example of an input that I

1 D. Card

2 believe would be important in
3 assigning the personal rating that
4 is missing from Professor
5 Arcidiacono's personal rating model
6 and is also missing from our --
7 from the database entirely.

8 So there is not much we can do
9 about that.

10 BY MR. STRAWBRIDGE:

11 Q. And is it your assumption that
12 if we had that information, it would
13 close the gap in the personal rating
14 between Asians and whites?

15 MS. ELLSWORTH: Object to the
16 form.

17 THE WITNESS: I don't have
18 direct evidence on that. What I do
19 know is that the personal rating
20 assigned to whites is higher than
21 the personal rating assigned to
22 Asians, conditional on the observed
23 factors. And so one of the
24 conjectures would be that that
25 might be part of the story.

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2 incentives of Harvard.

3 And I disagree with that type
4 of analysis -- that type of conclusion on
5 the basis of statistical evidence.

6 MR. STRAWBRIDGE: Can we take
7 a short break?

8 MS. ELLSWORTH: Okay.

9 THE VIDEO OPERATOR: The time
10 is 3:13. We are off the record.

11 (A recess was taken at
12 3:12:14 p.m., after which the deposition
13 resumed at 3:28 p.m.)

39

14 THE VIDEO OPERATOR: The time
15 is 3:28. We are back on the
16 record.

17 BY MR. STRAWBRIDGE:

18 Q. Do you think that Asian
19 Americans on average have less attractive
20 personal qualities than white applicants
21 in Harvard's application pool?

22 MS. ELLSWORTH: Objection.
23 Are you asking for a personal
24 opinion?

25 MR. STRAWBRIDGE: No.

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2 THE WITNESS: I have no way of
3 knowing that.

4 BY MR. STRAWBRIDGE:

5 Q. Can you think of -- do you
6 have any reason to believe that Asian
7 Americans are not as effervescent as
8 whites in Harvard's applicant pool?

9 MS. ELLSWORTH: Objection.

10 THE WITNESS: I have no way of
11 knowing that.

12 BY MR. STRAWBRIDGE:

13 Q. So it could be true?

14 MS. ELLSWORTH: Objection.

15 THE WITNESS: May or may not
16 be true.

17 BY MR. STRAWBRIDGE:

18 Q. It is one possible explanation
19 for the difference in their personal
20 ratings?

21 MS. ELLSWORTH: Object to the
22 form.

23 THE WITNESS: Well, if -- if
24 effervescence was, indeed, a
25 significant determinative personal

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2 rating conditional on the other
3 factors then -- and you could
4 measure effervescence and you found
5 that, I guess I would -- then I
6 would say, well, you found that and
7 I would agree with it, but no one
8 has done that exercise so I don't
9 really know what to say.

10 BY MR. STRAWBRIDGE:

11 Q. Well, someone's assigned
12 personal ratings to all of the
13 applicants?

14 A. They are, yes.

15 Q. Right. So I am just asking,
16 do you -- do you think that an
17 explanation for the gap in the personal
18 ratings between Asian Americans and white
19 applicants is a lack of effervescence in
20 the Asian American pool?

21 MS. ELLSWORTH: Object to the
22 form.

23 THE WITNESS: I think the --
24 my understanding is that the
25 readers look for something they

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2 call personal qualities. And I
3 don't exactly know what those are,
4 but they -- they talk about that in
5 some of the materials I've seen.

6 And so I think that what I
7 would probably believe to be true
8 is that they see slightly fewer
9 personal qualities conditional on
10 academic qualities. Again, this is
11 all conditional on academic
12 qualities.

13 BY MR. STRAWBRIDGE:

14 Q. And why do you think that's
15 the case?

16 A. I don't know exactly.

17 Q. Well, you can't rule out the
18 fact that it is racial bias. What other
19 explanation could there be for why the
20 white applicants in Harvard's pool
21 receive higher personal ratings than the
22 Asian American applicants?

23 MS. ELLSWORTH: Objection.

24 THE WITNESS: I don't really
25 -- I haven't really given that any

1 D. Card

2 thought directly.

3 BY MR. STRAWBRIDGE:

4 Q. Isn't that the entire question
5 that we need to answer when we decide
6 whether the personal ratings should be
7 included in the model?

8 MS. ELLSWORTH: Object to the
9 form.

10 THE WITNESS: No, not at all,
11 because we see a difference between
12 Asian applicants and white
13 applicants in their extracurricular
14 rating and their academic rating,
15 statistically significant positive
16 gap.

17 I don't think that -- and, in
18 fact, I would never conclude that
19 that means that there is positive
20 racial bias in favor of Asian
21 applicants. So the presence of a
22 significant coefficient doesn't say
23 that there is a racial animus
24 against whites in the assignment of
25 academic credentials.

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2 BY MR. STRAWBRIDGE:

3 Q. But there are other ways to
4 check that, right? We can look at
5 academic index, right?

6 A. Well, this is from Professor
7 Arcidiacono's model, which controls for,
8 among other things, academic index
9 variables and all the components of that.
10 So even conditional on all those things,
11 what his model shows is that Asian
12 Americans receive a statistically higher
13 academic rating.

14 And I conclude, and he
15 concludes, he agrees with me, that that's
16 the most likely explanation for that is
17 unobserved characteristics of the
18 candidate. And I don't have an
19 explanation for what those are either.

20 But I'm -- as is very standard
21 in the, you know, statistical analysis
22 and attempts to make inferences from
23 observational data of this type, I don't
24 really think that I can speculate exactly
25 what the differences are.

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2 Q. Do you think that -- well, did
3 you review the depositions in this case?

4 A. I reviewed the ones that are
5 described in the -- in my appendix.

6 Q. Did you see any testimony from
7 any Harvard admissions officer that the
8 Asian Americans were lacking in the
9 personal qualities that they evaluated in
10 assigning a personal rating as a group?

11 MS. ELLSWORTH: Object to the
12 form.

13 THE WITNESS: I didn't
14 specifically look at that, but I'm
15 not aware of that one way or the
16 other.

17 BY MR. STRAWBRIDGE:

18 Q. You'd assume that to be true,
19 right?

20 A. No, not necessarily because my
21 interpretation of the -- of that would be
22 are they different conditional on -- so
23 there is two questions you could ask.

24 More or less the kind of
25 questions we were discussing before the

1 D. Card

2 break, one question would be: Do Asian
3 Americans as a whole have higher or lower
4 or the same personal qualities as, say,
5 white Americans?

6 But that's not really what's
7 relevant for my statistical model. And I
8 -- my interpretation of how someone might
9 answer that would be they might be
10 thinking, well, as a whole, they are the
11 same, but when I'm assigning the personal
12 rating, what's relevant is I have got
13 some of these characteristics that I can
14 see, and some that I can't. There is a
15 deficit on some of the ones that I can't
16 see.

17 So that could contribute to a
18 negative coefficient for Asians in that
19 assignment, just as there must be some or
20 there -- my interpretation is there must
21 be some unobserved characteristics of the
22 academic credentials of Asian Americans,
23 conditional on this broad set of other
24 academic qualities that we can observe in
25 the data and that Professor Arcidiacono

1 D. Card

2 puts into his model that leads the --
3 leads the admissions people to give them
4 a higher assignment.

5 BY MR. STRAWBRIDGE:

6 Q. So you would not accept the
7 testimony from Harvard's admissions
8 officers that they don't see any
9 difference between the Asian American
10 applicants with respect to their personal
11 qualities and the white applicants?

12 MS. ELLSWORTH: Objection.

13 THE WITNESS: I would have to
14 see how the question was asked, and
15 I would have to think about
16 whether, if they are asking that
17 about the overall characteristics,
18 not conditional on their other
19 characteristics that are, say,
20 included in these models, I would
21 have to think about that.

22 Because I think several of
23 these documents are really focusing
24 on the difference between the
25 unconditional, in other words, the

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2 Nevertheless, there is a
3 significant positive, so there must
4 be, according to Professor
5 Arcidiacono's argument, there must
6 be unobserved factors there.

7 BY MR. STRAWBRIDGE:

8 Q. But I asked you about the
9 personal characteristics. What do you
10 think they are in the personal
11 characteristics, not the academics, the
12 personal?

13 MS. ELLSWORTH: Object to the
14 form. I believe he already --

15 THE WITNESS: I have no idea.
16 I believe I have stated that
17 clearly.

18 BY MR. STRAWBRIDGE:

19 Q. Inclusion of parental
20 occupation is important to your model?

21 A. I believe it should be
22 included in the analysis of admissions,
23 yes.

24 Q. How many variables did you --
25 did that add to your model?

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2 A. Let me look at my -- the
3 appendix -- you don't have tabs on
4 appendices here, so I am having a little
5 bit of trouble finding the right tabs.

6 Q. If I told you it was 46, does
7 that number sound more or less correct?

8 A. 46 per year?

9 Q. 46 parental occupations.

10 A. It seems to show in my
11 Exhibit 28 of my -- of my rebuttal report
12 that there is 28 categories -- 23
13 categories, excuse me.

14 Q. 23 categories for fathers,
15 right?

16 A. Yes.

17 Q. And 23 categories for mothers?

18 A. Yes.

19 Q. So that's 46, right?

20 A. Correct. And then there is
21 one omitted for each.

22 Q. So 47?

23 A. 44.

24 Q. 48?

25 A. 44.

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2 Q. 44, I'm sorry. Thank you.

3 It's a long day.

4 When you use the occupations
5 in your model, are they the same
6 occupations that are listed on Harvard's
7 summary sheets?

8 A. Not necessarily, to the best
9 of my knowledge.

10 Q. In fact, did you have to use a
11 code to translate the parental
12 occupations into different categories?

13 MS. ELLSWORTH: Object to the
14 form.

15 THE WITNESS: As I explain, I
16 think fairly clearly in Appendix B
17 of my rebuttal report, there's a
18 procedure that I developed to
19 classify the different categories
20 that are used in the -- first of
21 all, there is two occupation
22 categories that are used, and one
23 of those is more prevalent in one
24 year; then the other one is more
25 prevalent in later years, but small

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2 fractions of the data in later
3 years continue to be coded in the
4 -- in the first method, as far as I
5 can tell.

6 So I make a table or an
7 algorithm to construct them all
8 into a coherent set of categories.

9 BY MR. STRAWBRIDGE:

10 Q. Did you use -- and that
11 algorithm involves more than 100 lines of
12 code that you had to write?

13 A. That the staff at Cornerstone
14 wrote under my direction, yeah.

15 Q. And you agree that at least on
16 one occasion, the code in your data does
17 not actually match what the summary
18 sheets that were produced by Harvard?

19 MS. ELLSWORTH: Object to the
20 form.

21 THE WITNESS: My understanding
22 is that that's true, yes.

23 BY MR. STRAWBRIDGE:

24 Q. Led you to in at least in one
25 instance to report unskilled laborer as a

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2 skilled tradesperson?

3 A. It led me to put them in the
4 same bucket in the classification system,
5 but, as I say in this appendix,
6 recategorizing labor into that group into
7 the low skilled mix, essentially no
8 difference to any of my conclusions.

9 Q. Well, that's assuming that
10 they are all -- that they are all -- that
11 all the data is correct, right?

12 A. Well, this is -- first of all,
13 it is not entirely clear who is filling
14 out the forms for the common application,
15 the universal application. Oftentimes,
16 in fact, if you look on the -- on the
17 Internet, there is questions about how to
18 fill out the common application form.

19 So I am not necessarily
20 claiming, and nor is it necessary for my
21 analysis, that occupations are reported
22 exactly the way that some expert in
23 occupation coding would assign them on an
24 individual basis, but even with an expert
25 assigning occupation codes, there are

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2 known to be some slippage in assignment
3 of complicated variable like occupation.

4 Some people fit into
5 occupations which are between the lines.
6 I have done in the course of my career
7 studies of the effect of -- this is a
8 problem that arises in lots of variables
9 measured in economic analyses. We call
10 it misclassification error.

11 It means that different
12 algorithms, slightly different algorithms
13 or slightly different people who are
14 doing the assignment would reach slightly
15 different conclusions.

16 And my view is based on my
17 professional work in the past, looking at
18 this kind of problem, that that does not
19 in any way invalidate the use of the
20 occupation codes. In fact, the fact that
21 there may be some slippage in the
22 assignment of the -- of an occupation
23 code, if anything, would give the
24 measured occupation codes that I have a
25 little bit less statistical power and

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2 prevent them from performing a stronger
3 role as they would in the model, if I had
4 some measures that did not have that
5 misclassification error.

6 Q. We discussed this earlier, but
7 I just want to make sure I understand.
8 When you were deciding to put the
9 parental occupations in, did you test for
10 statistical significance?

11 A. I'm not entirely sure of
12 whether, at what stage of the analysis
13 that kind of exercise would have been
14 done, so I can't say for sure.

15 Q. You don't dispute that some of
16 the parental occupation categories vary
17 substantially from year to year?

18 MS. ELLSWORTH: Object to the
19 form.

20 THE WITNESS: I don't dispute
21 that, for example, the category
22 unemployed disappears in some
23 years, and so one of the reasons --
24 or is much less frequent in some
25 years.

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2 And so one of the reasons why
3 I fit a model, a year-by-year model
4 is to allow the coefficients
5 assigned to the occupation
6 variables to change from year to
7 year, just like many of the other
8 characteristics change from year to
9 year in the mean or prevalence in
10 the sample.

11 For example, the disadvantaged
12 flag variable, which is assigned by
13 Harvard readers, and would seem to
14 be not subject to some of these
15 same issues, nevertheless, the
16 fraction of students that have that
17 code changes substantially between
18 2018 and 2019.

19 BY MR. STRAWBRIDGE:

20 Q. And do you understand why that
21 is?

22 A. No.

23 Q. Did you read Sally Donohue's
24 deposition?

25 A. No.

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2 Q. And do you know whether or not
3 there is any testimony that gave a
4 specific reason as to why the
5 disadvantaged flight changed on that
6 level in 2019?

7 MS. ELLSWORTH: Object to the
8 form.

9 THE WITNESS: No.

10 BY MR. STRAWBRIDGE:

11 Q. Do you have any explanation as
12 to why there would be no unemployed
13 people in the Harvard data pool for some
14 of the years?

15 MS. ELLSWORTH: Object to the
16 form.

17 THE WITNESS: My guess is
18 because the questions that were
19 employed in the common application
20 and universal application did not
21 collect it in that way. That
22 category wasn't available.

23 BY MR. STRAWBRIDGE:

24 Q. You don't think that, like,
25 the number of unemployed people

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2 oscillated that way?

3 A. I don't think it does, but as
4 I said, because I am putting a
5 year-by-year model, I don't think it
6 matters at all.

7 Q. Did you ask any of these
8 questions of Dean Fitzsimmons when you
9 had your conversation with him?

10 MS. ELLSWORTH: Object to the
11 form.

12 THE WITNESS: As I recall, I
13 asked him if the committee uses
14 parental occupation information in
15 making their assessment. And we
16 talked over, because he is a
17 sociologist and knew quite well
18 some of the underlying literature
19 on -- on occupation and the
20 importance of occupation in the
21 sociology literature, so we had a
22 bit of a talk about that.

23 BY MR. STRAWBRIDGE:

24 Q. And what -- and what did he
25 specifically tell you?

1 D. Card

2 A. He said that occupation was a
3 very important part of the process, that
4 it is on the summary sheets.

5 Q. Is that disclosed anywhere in
6 your report?

7 A. My discussion with --

8 Q. Yes.

9 A. No.

10 Q. Did you do anything to test
11 whether or not Harvard was treating
12 different occupations differently based
13 on race?

14 MS. ELLSWORTH: Object to the
15 form.

16 THE WITNESS: I show that or I
17 -- I can't remember where this is
18 reported, whether it is part of my
19 original report or not. The
20 occupations vary by race.

21 BY MR. STRAWBRIDGE:

22 Q. Did you interact race and the
23 occupation codes in your model?

24 A. No.

25 Q. Did you estimate separately

1 D. Card

2 question?

3 A. No.

4 Q. Were you a percipient witness
5 in the admissions office in 2013?

6 MS. ELLSWORTH: Object to the
7 form.

8 THE WITNESS: No, but neither
9 was Professor Arcidiacono. And he
10 seems to want to make that kind of
11 a conclusion.

12 BY MR. STRAWBRIDGE:

13 Q. Let me ask you this: You set
14 forth your alternative math in paragraph
15 161 of your rebuttal report, correct, on
16 probability?

17 A. Let me check it. Paragraph
18 121?

19 Q. Yes.

20 A. In my rebuttal report?

21 MS. ELLSWORTH: Paragraph 161,
22 I think, is what --

23 BY MR. STRAWBRIDGE:

24 Q. I'm sorry, it was 161. I
25 misspoke. I apologize.

1 D. Card

2 A. Oh. Yes.

3 Q. So you conclude that the --
4 that given the years that you just
5 described and the different racial
6 categories, that the actual probability
7 of seeing a pattern over a three-year
8 period is about 17 percent?

9 A. Assuming for the sake of
10 simplicity that there's a 0.2 chance that
11 the group's average rate matches the
12 average admission rate for other
13 applicants, so that would be the same
14 kind of calculation that he does, so
15 assume that number, then take the 92
16 combinations, that's what I did.

17 Q. You earlier said you didn't
18 challenge that number, you hadn't
19 challenged that calculation?

20 MS. ELLSWORTH: Object to the
21 form.

22 THE WITNESS: That 0.2 is his
23 calculation, yes.

24 BY MR. STRAWBRIDGE:

25 Q. The -- your calculation

1 D. Card

2 assumes that each of those outcomes is
3 independent with one another?

4 A. Yes.

5 Q. Is that true?

6 A. It would not be exactly true.
7 It would be -- it might be approximately
8 true, depending on the race group you are
9 thinking of.

10 Q. What makes something
11 "approximately true"?

12 A. Well, the actual calculation
13 for the permutations, I didn't try and
14 do. I tried to do a simplified
15 calculation. That's what I have done
16 here.

17 Q. For example, you would agree,
18 right, that the Hispanic methodology
19 between IPEDS and the new methodology
20 does not differ?

21 MS. ELLSWORTH: Object to the
22 form.

23 THE WITNESS: No, I would
24 disagree with that.

25 BY MR. STRAWBRIDGE:

1 D. Card

2 Q. Do you think the two things
3 differ?

4 A. Yes, because under the new
5 methodology, individuals are allowed to
6 report multiple races. And so someone
7 could be both Hispanic and African
8 American, for example.

9 Q. Which outcomes do you think
10 are not independent of one another?

11 A. Do you want me to go through
12 the permutation argument?

13 Q. I am just asking which ones
14 you think -- you told me that you do not
15 think they are all independent of one
16 another. So I am asking which ones.

17 A. Well, the problem is that the
18 groups as a whole have to add up to the
19 total. And so there's a little bit of
20 dependence between the total and the
21 averages.

22 Q. Would that raise or lower the
23 number you put in your report?

24 MS. ELLSWORTH: Object to the
25 form.

1 D. Card

2 THE WITNESS: Off the top of
3 my head, I don't know. I don't
4 believe it would change it much,
5 but I don't know.

6 BY MR. STRAWBRIDGE:

7 Q. Does the definition of African
8 American differ between old methodology
9 and new methodology?

10 A. Well, the old methodology was
11 based on applicants checking a single box
12 that were -- and a categorization based
13 on alphabetical order. The new
14 methodology allows candidates to check
15 multiple boxes.

16 Q. But if you were looking at the
17 admission rate of African Americans under
18 the old methodology or the new
19 methodology, just looking at African
20 Americans, you would see the exact same
21 admission rate, wouldn't you?

22 MS. ELLSWORTH: Object to the
23 form.

24 THE WITNESS: I don't think
25 so. Because I think under the new

1 D. Card

2 Q. Allowing people to choose --
3 this is a question of reporting, not
4 choice. I am just saying people -- at
5 the end of the admissions process, do you
6 know how many people have checked all the
7 boxes, 500 people in the admissions
8 process checked African American, and
9 they all also checked Hispanic.

10 A. Well, my understanding is that
11 the admission rates for African Americans
12 under these three different methodologies
13 in any given year are -- are slightly
14 different.

15 Q. And that's essential to the
16 math that you have done here?

17 MS. ELLSWORTH: Object to the
18 form.

19 THE WITNESS: Not necessarily,
20 but it is part -- under the
21 assumption I am making here, that
22 would be -- I think that would be
23 built in, yes, sir.

24 BY MR. STRAWBRIDGE:

25 Q. Have you seen in this case any

1 D. Card

2 one-pagers -- do you know what I mean by
3 a one-pager?

4 A. I have a vague understanding
5 of what that is, yeah.

6 Q. Have you seen any one-pagers
7 prepared by the admissions office during
8 the committee meeting process listing
9 IPED statistics before January 2013?

10 MS. ELLSWORTH: Object to the
11 form.

12 THE WITNESS: Repeat the
13 question again?

14 BY MR. STRAWBRIDGE:

15 Q. Have you seen a one-pager
16 prepared by the admissions office during
17 the committee meeting process that lists
18 the IPED statistics prior to January
19 2013?

20 MS. ELLSWORTH: Object to the
21 form.

22 THE WITNESS: I have -- I have
23 only seen a couple of these forms,
24 and so I can't say I have done an
25 exhaustive search. I was never

1 D. Card

2 searching for that. But I don't
3 believe I would have seen that.

4 I believe the forms I looked
5 at are the ones that are referred
6 to in Professor Arcidiacono's
7 report.

8 BY MR. STRAWBRIDGE:

9 Q. And you also referred to some
10 in some documents in your report, right?

11 A. I did.

12 Q. Have you -- did you see
13 Professor Arcidiacono's note that the
14 IPEDS' number was stored differently in
15 the admissions database as it was
16 produced to him before the 2017
17 admissions cycle versus after?

18 A. I believe that there is a
19 different field that it is captured in,
20 that's right.

21 Q. And your report doesn't
22 challenge the -- that statement in
23 Professor Arcidiacono's report?

24 MS. ELLSWORTH: Objection to
25 form.

1
2 DISTRICT OF COLUMBIA, to wit:
3

4 I, Karen K. Brynteson, the
5 officer before whom the foregoing
6 deposition was taken, do hereby certify
7 that the within-named witness
8 personally appeared before me at the
9 time and place herein set out, and
10 after having been duly sworn by me,
11 according to law, was examined by
12 counsel.
13

14 I further certify that the
15 examination was recorded
16 stenographically by me and this
17 transcript is a true record of the
18 proceedings.
19

20 I further certify that I am
21 not of counsel to any of the parties,
22 nor an employee of counsel, nor related
23 to any of the parties, nor in any way
24 interested in the outcome of this
25 action.

As witness my hand and
notarial seal this 9th day of May,
2018.

KAREN K. BRYNTESON
Notary Public

MY COMMISSION EXPIRES: 10-30-22